## Lithobates pipiens (Northern Leopard Frog)

Report Date: January 13, 2016

**Priority 2 Species of Greatest Conservation Need (SGCN)** 

Class: Amphibia (Amphibians)
Order: Anura (Frogs And Toads)
Family: Ranidae (True Frogs)

#### **General comments:**

There are >100 occurrences statewide, but concerns remain about declines in southern Maine and range-wide. 6 of 6 reviewers recommend SC listing.

## **Species Conservation Range Maps for Northern Leopard Frog:**

Town Map: <u>Lithobates pipiens\_Towns.pdf</u>
Subwatershed Map: <u>Lithobates pipiens\_HUC12.pdf</u>

### **SGCN Priority Ranking - Designation Criteria:**

**Risk of Extirpation: NA** 

**State Special Concern or NMFS Species of Concern:** 

Lithobates pipiens is listed as a species of Special Concern in Maine.

**Recent Significant Declines: NA** 

**Regional Endemic: NA** 

**High Regional Conservation Priority:** 

Northeast Endangered Species and Wildlife Diversity Technical Committee:

Risk: Yes, Data: Yes, Area: No, Spec: Yes, Warrant Listing: No, Total Categories with "Yes": 3

Northeast Partners In Amphibian and Reptile Conservation (NEPARC):

Regional Responsibility:< 50 % US Distribution, Concern: >= 50 % of States Listed in WAP

**High Climate Change Vulnerability: NA** 

Understudied rare taxa: NA

**Historical: NA** 

**Culturally Significant: NA** 

## **Habitats Assigned to Northern Leopard Frog:**

Formation Name Agricultural

Macrogroup Name Agricultural
Habitat System Name: Pasture-Hay

Formation Name Boreal Wetland Forest

Macrogroup Name Boreal Forested Peatland

Habitat System Name: Boreal-Laurentian Conifer Acidic Swamp

Formation Name Freshwater Aquatic

Macrogroup Name Lakes and Ponds

Habitat System Name: Dystrophic Notes: bog ponds

Habitat System Name: Eutrophic Notes: vegetated coves and shorelines

Habitat System Name: Mesotrophic or Intermediate Notes: vegetated coves and shorelines

Habitat System Name: Vernal Pool

Macrogroup Name Rivers and Streams

Habitat System Name: Large River Notes: slow vegetated sections
Habitat System Name: Medium River Notes: slow vegetated sections
Habitat System Name: Small River Notes: slow vegetated sections

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Formation Name Freshwater Marsh

Macrogroup Name Emergent Marsh

Habitat System Name: Laurentian-Acadian Freshwater Marsh \*\*Primary Habitat\*\*

Macrogroup Name Modified-Managed Marsh
Habitat System Name: Modified-Managed Marsh
Macrogroup Name Wet Meadow-Shrub Marsh

Habitat System Name: Laurentian-Acadian Wet Meadow-Shrub Swamp \*\*Primary Habitat\*\*

Formation Name Grassland & Shrubland

Macrogroup Name Ruderal Shrubland & Grassland

Habitat System Name: Introduced Shrubland
Habitat System Name: Powerline Right-of-Way
Habitat System Name: Ruderal Upland - Old Field

Formation Name Northeastern Wetland Forest

Macrogroup Name Northeastern Floodplain Forest

Habitat System Name: Laurentian-Acadian Floodplain Systems

Formation Name Peatland

Macrogroup Name Northern Peatland & Fens

Habitat System Name: Northern Peatland Macrogroup - Unknown Habitat System

### **Stressors Assigned to Northern Leopard Frog:**

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Agricultural and Forestry Effluents

**Severity:** Moderate Severity **Actionability:** Moderately actionable **Notes:** Aquatic larvae are sensitive to pesticides and excessive nutrients

IUCN Level 2 Threat: Domestic and Urban Waste Water

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Aquatic larvae are sensitive to toxins, excessive nutrients, and pharmaceutical pollution

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Housing and Urban Areas

Severity: Moderate Severity Actionability: Moderately actionable

**Notes:** Wetland habitat loss and degradation of riparian habitat quality and function

IUCN Level 1 Threat Transportation and Service Corridors

IUCN Level 2 Threat: Roads and Railroads

Severity: Moderate Severity Actionability: Moderately actionable

Notes: Roadkill at high value wetland causeways

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IUCN Level 1 Threat Agriculture and Aquaculture

IUCN Level 2 Threat: Annual and Perennial Non-timber crops

**Severity:** Moderate Severity **Actionability:** Actionable with difficulty **Notes:** Wetland habitat loss and degradation of riparian habitat quality and function

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Problematic Species-Diseases of Unknown Origin

**Severity:** Moderate Severity **Actionability:** Actionable with difficulty

Notes: Chytrid fungus documented in a high proportion of Maine specimens; implicated as a contributing factor in the

global decline of amphibian populations of mutiple taxa

IUCN Level 2 Threat: Viral-Prion-induced Diseases

**Severity:** Moderate Severity **Actionability:** Actionable with difficulty

Notes: Rana virus; implicated as a contributing factor in the global decline of amphibian populations of mutiple taxa

### **Species Level Conservation Actions Assigned to Northern Leopard Frog:**

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

#### **Guild Level Conservation Actions:**

This Species is currently not attributed to a guild.

#### **Broad Taxonomic Group Conservation Actions:**

Relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

#### **Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.